

## WHAT IS CLAIMED IS:

- 1       1. A protection structure of a circuit board,  
2 comprising:  
3       a circuit board fixed to an electronic device;  
4       electronic components mounted on said circuit board; and  
5       a protection cover for protecting said electronic  
6 components; wherein:  
7       at least one end of said protection cover is engaged  
8 with and fixed to a protection cover fixing means provided  
9 on at least one of said circuit board and said electronic  
10 device so as to be freely opened and closed utilizing its  
11 elasticity.
- 1       2. A protection structure of a circuit board according to  
2 claim 1, wherein:  
3       said protection cover fixing means is a hook portion  
4 formed out of a hook-shaped structure projecting at one end  
5 of said circuit board.
- 1       3. A protection structure of a circuit board according to  
2 claim 1, wherein:  
3       said protection cover fixing means is a hook portion  
4 formed out of a hook-shaped structure projecting on said  
5 electronic device near one end of said circuit board.
- 1       4. A protection structure of a circuit board according to  
2 claim 1, wherein:  
3       said protection cover is provided with a first engaging  
4 portion to be engaged with said electronic device side at  
5 one end of it, a protection portion which starts from said

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6 first engaging portion, reaches the electronic component  
7 mounting face of said circuit board as being curved and  
8 extends to the other end of said circuit board and thereby  
9 covers electronic components mounted on said circuit board,  
10 and a second engaging portion provided by bending the fore-  
11 end portion of said protection portion, wherein;

12 at least one of said first and second engaging portions  
13 is fixed to said protection cover so as to be freely opened  
14 and closed.

1 5. A protection structure of a circuit board according to  
2 claim 4, wherein:

3 the protection portion of said protection cover is made  
4 not to rise apart from the electronic component mounting  
5 face of said circuit board by engaging at least one  
6 engaging portion of said protection cover with said  
7 protection cover fixing means.

1 6. A protection structure of a circuit board according to  
2 claim 1, wherein:

3 an insulating plate is provided between said electronic  
4 device and said circuit board.

1 7. A protection structure of a circuit board according to  
2 claim 6, wherein;

3 one end of said protection cover is freely opened and  
4 closed, the other end is fixed to said electronic device  
5 side, and said insulating plate is made to extend from the  
6 other end of said protection cover under said circuit board.

1 8. A protection structure of a circuit board according to

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2 claim 6, wherein:

3 said insulating plate is a structure separate from said  
4 protection cover.

1 9. A protection structure of a circuit board according to  
2 claim 1, wherein:

3 said protection cover fixing means is provided with a gap  
4 forming means for providing a gap necessary for engaging at  
5 least one engaging portion of said protection cover with an  
6 end of said circuit board between said circuit board and  
7 said electronic device.

1 10. A protection structure of a circuit board according  
2 to claim 9, wherein:

3 said gap forming means is a contraction-processed portion  
4 obtained by pressing out a part of the mounting surface of  
5 said electronic device on which said circuit board is to be  
6 mounted.

1 11. A protection structure of a circuit board according  
2 to claim 9, wherein:

3 said gap forming means is a spacer interposed between said  
4 circuit board and said electronic device.

1 12. A protection structure of a circuit board according  
2 to claim 9, wherein:

3 said gap forming means is an insulating plate interposed  
4 between said circuit board and said electronic device.

1 13. A protection structure of a circuit board according  
2 to claim 1, wherein:

3 said electronic device is a liquid crystal display device.

PCT/JP2007/050027

1       14. A method for manufacturing a protection structure  
2 comprising the steps of:  
3       fixing a circuit board to an electronic device, and  
4 protecting a side of said circuit board being not covered  
5 with said electronic device from the outside by engaging at  
6 least one end of a protection cover with a protection cover  
7 fixing means provided on said electronic device side.

1       15. A method for manufacturing a protection structure  
2 according to claim 14, wherein:

3       said step of fixing said circuit board to said electronic  
4 device is performed by simultaneously fixing a separate  
5 insulating plate between said electronic device and said  
6 circuit board additionally to fixing said electronic device  
7 and said circuit board, and is provided with a step of  
8 protecting a side of said circuit board being not covered  
9 with said electronic device from the outside by engaging at  
10 least one end of said protection cover with said protection  
11 cover fixing means provided on said electronic device side.

1       16. A method for manufacturing a protection structure  
2 according to claim 14, wherein:

3       said step of fixing said circuit board to said electronic  
4 device is performed by fixing an insulating plate to said  
5 electronic device and thereafter fixing said circuit board  
6 to said electronic device through said insulating plate  
7 fixed to said electronic device, and is provided with a  
8 step of protecting a side of said circuit board being not

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9 covered with said electronic device from the outside by  
10 engaging at least one end of said protection cover with  
11 said protection cover fixing means provided on said  
12 electronic device side.

1 17. A method for manufacturing a protection structure  
2 according to claim 16, wherein:

3 said step of fixing said circuit board to said electronic  
4 device through said insulating plate fixed to said  
5 electronic device interposes a spacer between said circuit  
6 board and said insulating plate.

1 18. A method for manufacturing a protection structure  
2 according to claim 14, wherein:

3 said step of fixing said circuit board to said electronic  
4 device is performed by fixing an insulating plate to said  
5 circuit board and thereafter fixing said circuit board  
6 having said insulating plate fixed on it to said electronic  
7 device through said insulating plate, and is provided with  
8 a step of protecting a side of said circuit board being not  
9 covered with said electronic device from the outside by  
10 engaging at least one end of said protection cover with  
11 said protection cover fixing means provided on said  
12 electronic device side.

1 19. A method for manufacturing a protection structure  
2 according to claim 17, wherein:

3 said step of fixing said circuit board having said  
4 insulating plate fixed  
5 on it to said electronic device interposes a spacer between

- 6 said insulating plate and said electronic device.
- 1 20. A method for manufacturing a protection structure
- 2 according to claim 14, wherein:
- 3 said electronic device is a liquid crystal display device.